

An Experimental Study on Autonomic Consciousness of Artificial Intelligence Neural Network-Highly Simulated Bionic Intelligent Neural System

Research on Experimental Study of Artificial Intelligence Neural Network Self-Consciousness
Recherche sur l'étude expérimentale de la conscience autonome du réseau de neurones d'intelligence artificielle
Thesis Outline (Doctoral Level)
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Transmission Software MechanismChapter 5 Detailed Experimental Steps and Process (English Description)Chapter 5 Detailed Experimental Steps and Process5.1 Experimental Preparation Stage1. System Commissioning: Complete the hardware-software coupling debugging of the entire AI neural network self-consciousness experimental system, ensure the normal operation of storage receiver, analysis filter processor, multi-language processor and other core units, and meet the 16:9 experimental data output standard.2. Data Resource Loading: Input the complete set of chess game data, chess manuals, opening and endgame databases into the high-capacity storage hardware unit, establish a multi-dimensional data resource support system, and complete the data indexing and calling mechanism construction.3. Sensor Calibration: Calibrate the vision, audition and tactition biological sensors to ensure the accurate collection and transmission of external game information, and realize the stable access of multi-modal perceptual information.4. Parameter Setting: Set the initial parameters of neural network bionic chip, register, analysis and purification module, and determine the logical threshold of yes-intermediate-no judgment unit.5.2 Experimental Start Stage: Multi-Modal Perception Information Input1. The experimental system obtains the chess game scene information, opponent's action information and game environment information through vision, audition and tactition sensors, and transmits all perceptual signals to the Storage Receiver (I) in the form of electrical signals.2. The storage receiver completes the real-time storage, temporary caching and preliminary classification of perceptual information, and transmits the original perceptual data to the next-level hardware unit.5.3 Experimental Operation Stage: Information Analysis and Filtering Processing1. The original perceptual data is transmitted to the Analysis Filter Processor (II), which carries out information analysis, feature extraction, redundant data filtering and effective information screening through the ultra-large-scale integrated circuit.2. The analysis filter processor feeds back the filtered effective information to the storage unit, and forms a preliminary information interaction and optimization cycle to complete the primary processing of game-related data.5.4 Experimental Operation Stage: Multi-Language and Multi-Thinking Processing1. The effective information is input into the Natural Language-Logical Language-Image Language-Mathematical Logic Language Processing Recognizer (III).2. This unit completes the conversion and recognition of multi-modal information, realizes the simulation operation of logical thinking,

image thinking, mathematical logic thinking and intuitive thinking, and forms the basic thinking carrier of chess game decision-making.³ The multi-language and multi-thinking processing results are output to the next-level analysis unit in the form of standardized information.

5.5 Experimental Operation Stage: Initialization and Evolutionary Analysis

¹ The multi-thinking processing information enters the Initialization and Evolution Analyzer (IV), which carries out preliminary judgment, step-by-step reasoning and evolutionary analysis of the chess game situation.² The analyzer simulates the gradual advancement and upgrading process of human thinking, forms the preliminary chess-playing scheme and transmits it to the polymerization and purification unit.

5.6 Experimental Operation Stage: Information Polymerization, Purification and Fusion

¹ The preliminary chess-playing scheme is input into the Polymerization, Purification and Fusion Device (V), which carries out deep purification, multi-scheme polymerization, information fusion and interactive optimization of the decision-making information.² This unit integrates all effective data resources in the database, eliminates unreasonable schemes, optimizes the decision-making logic, and forms a high-quality alternative chess-playing strategy.³ The polymerization and fusion device completes the deep processing from mechanical passive thinking to autonomous active thinking analysis.

5.7 Experimental Operation Stage: Ternary Judgment and Thinking Feedback

¹ The optimized chess-playing strategy is transmitted to the Yes-Intermediate-No Judgment and Negation of Negation Unit (VI).² The unit carries out autonomous logical judgment: affirming the optimal scheme, negating the invalid scheme, and re-optimizing the intermediate scheme through the negation of negation logic.³ The judgment result forms a deep thinking feedback, which is transmitted back to the analysis processor and polymerization fusion device for secondary optimization and deepening.

5.8 Experimental Execution Stage: Autonomous Chess-Playing Decision Output

¹ The system completes the final decision-making through multiple rounds of perception-cognition-judgment-reasoning-feedback cycle, and outputs the chess-playing action instructions without specific code program drive.² The decision-making process completely relies on large-scale data resources, bionic neural chip and bio-physical coupling system to realize autonomous thinking and autonomous behavior output.³ The opponent system carries out the same set of experimental process, forming a complete chess game confrontation.

5.9 Experimental Feedback and Deep Optimization

Stage1. After each chess-playing action, the system collects the result feedback information, transmits it to the storage receiver and analysis filter processor again.2. The system carries out register analysis, judgment, filtering, purification and integration, updates the thinking logic and optimizes the decision-making scheme.3. The system realizes the continuous evolution and deepening of self-consciousness simulation, and upgrades the perceptual, cognitive, reasoning and feedback capabilities.5.10 Experimental End Stage1. The chess game reaches the end state of win-draw-lose, and the system records the whole process of thinking evolution, decision-making change and feedback optimization.2. The experimental system saves all data of hardware operation, information transmission, thinking simulation and autonomous decision-making.3. Complete the disconnection of sensors, the shutdown of hardware system and the classification of experimental data.

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●●●《人工智能神经网络自主意识实验研究》细节等详细描述实验步骤和过程，英语说明实验。A.棋奕对垒，双方选手视觉听觉触觉后开始思考棋局步骤，感知认知接受反馈判断分析推理思维反馈提纯聚合融合优化深化，筛选各种方案后出手对局，是~中间体~不是，赢~和~输，自然语言逻辑语言形象语言数理逻辑语言，逻辑思维形象思维数理逻辑思维，直觉思维形成，初步判断逐步推进升级完成出棋。双方对局同理，主要依靠强大的数据库信息库资料库支持，并不需要特别设计相关的程序代码运作对局，只需要强大的数据资源支持帮助即可自行处理识别。譬如大量棋谱棋局，开局残局等数据信息资料，其中包括存储器分析器过滤器反馈器提纯聚合融合交互优化深化等过程，最终实现粗浅的机械的被动思维反馈分析到进一步的分析判断处理识别等，物理硬件配置软件配置交融兼容并蓄，实验才能达到目的。棋奕对垒智能机器人神经网络系统自主性意识感知认知反馈控制推理思维相当复杂深邃，涉及到神经物理神经生理神经化学生物控制系统的分析与综合，绝非简单的自控能力数据算力算法等就可完成，任何一步缺失都将会失败。所以，精心设计十分重要。神经化学神经生理学仿生仿真必定要和物理学的重要特征完美结合糅合耦合，生物控制推理思维反馈控制电路芯片，存储器分析器过滤反馈提纯聚合融合交互优化集成模块和生物控制芯片，大规模集成电路，将生物控制信息信号传递转化为物理过程，譬如脑机接口，生物传感器等等，实验过程步骤数据信息等都是如此。否则，人工智能神经网络自主意识永远不会开拓进取，只能停留在死板机械被动式的思维反馈意识中，难以进取陷入泥潭。寄存器分析研判，过滤反馈提纯聚合融合集成，过滤反馈提纯器等，最后形成初步判断推理思维反馈再到深度判断分析推理思维集成融合等，包括视觉听觉触觉嗅觉感觉以及自然语言形象语言数理逻辑语言逻辑语言，数理逻辑思维，逻辑思维形象思维等等都在其中。I.储存接收器II.分析过滤处理器III.自然语言处理逻辑语言形象语言数理逻辑语言处理识别器IV.初化衍化分析器V.聚化提纯聚合融合器VI.是——中间——否，否定之否定，肯定是肯定，中间体。可以进一步细化深化泛化优化，推理思维逻辑判断分析不需要特定代码程序，运行只需要大数据信息库丰富多彩即可获得收获。硬件系统配置协同融合交互完善，超大规模集成电路制造高级神经系统意识感知认知反馈控制推理思维芯片模块集成融合优化泛化能力。这才是关键所在。物理学的革命性创举，人工智能神经网络自主意识的重大突破重大发明。英语标注和详细说明。《人工智能神经网络自主

意识实验研究》彩图精彩纷呈完美演绎人工智能神经网络自主意识实验过程和步骤，一系列环环相扣的大型彩图，科学严谨求实一丝不苟，否则就会失败告终。

人工智能技术研发发展迅猛，最重要最关键的巅峰并不是自动驾驶和普通的智能机器人具身机器人工业机器人人身机器人之类，在于它的顶端设计，高度仿真仿生，仿造飞鸟展翅高飞制造飞机，仿造鱼类制造潜艇，如何仿造人类大脑高级神经活动意识感知认知思维反馈再造神经网络自主意识高度发达的机器人，是千万年人类的美好追求和愿望，也是人工智能科学家研究创新的根本所在，其意义和价值巨大，无与伦比，尚不待言，最重要的是它的实现相当复杂艰难的，并不是单纯人工智能软硬件其，算力算法数据库就可大功告成，创造再造人类智慧大脑的神话。人类大脑千年万年的进化演变过程十分复杂深奥，千万亿细胞基因蛋白质酶等等演变进化才发展成今日人类智慧和人类高级神经活动意识结构。人工智能技术研发从发展演变过程不过几百年之久，要想突飞猛进一日千里发生突变再造神经大脑是相当复杂艰难的，即便是仿真仿生也需要诸多条件因素配合，否则，无异于痴人做梦，异想天开。电子计算机，电脑堪比人脑，的确能力超前，甚至远远超过人类智慧。在一定意义上来说，他的确超越人类，但从另一方面说，他有难以超越，局限性很大，不可小觑。电脑人工智能神经网络系统意识感知认知充其量不过是机械被动预编程代码控制推理，而并不是真正是他们自主性意识感知认知反馈的高级神经意识系统，可以抛开数据库代码等自我认知感知能力，思维判断推理分析研判联想等等，二者大相径庭，不可同日而语。当然，我们并不否认人工智能神经网络系统一定的推理思维逻辑能力。人工智能原创科学家所追求的目标逻辑思维推理能力等都是如此。低级低等级的推理能力可行，但是毫无疑问局限性限制了它，再往前走一步就相当困难了，由被动变主动，由机械式转化为灵动式，由预编程控制推理到自主性自发性思维意识感知认知，需要各种各样的因素条件配合，否则，就会陷入困境难以逾越。这才是关键所在。《人工智能神经网络自主意识实验研究》细节等详细描述实验步骤和过程，英语说明实验。不要中文说明。棋奕对垒，双方选手视觉听觉触觉后开始思考棋局步骤，感知认知接受反馈判断分析推理思维反馈提纯聚合融合优化深化，筛选各种方案后出手对局，是~中间体~不是，赢~和~输，自然语言逻辑语言形象语言数理逻辑语言，逻辑思维形象思维数理逻辑思维，直觉思维形成，初步判断逐步推进升级完成出棋。双方对局同理，主要依靠强大的数据库信息库资料库支持，并不需要特别设计相关的程序代码运作对局，只需要强大的数据资源支持帮助即可自行处理识别。譬如大量棋谱棋局，开局残局等数据信息资料，其中包括存储器分析器过滤器反馈器提纯聚合融合交互优化深化等过程，最终实现粗浅的机械的被动思维反馈分析到进一步的分析判断处理识别等，物理硬件配置软件配置交融兼容并蓄，实验才能达到目的。棋奕对垒智能机器人神经网络系统自主性意识感知认知反馈控制推理思维相当复杂深邃，

涉及到神经物理神经生理神经化学生物控制系统的分析与综合，绝非简单的自控能力数据算力算法等就可完成，任何一步缺失都可会失败。所以，精心设计十分重要。神经化学神经生理学仿生仿真必定要和物理学的重要特征完美结合耦合，生物控制推理思维反馈控制电路芯片，存储器分析器过滤反馈提纯聚合融合交互优化集成模块和生物控制芯片，大规模集成电路，将生物控制信息信号传递转化为物理过程，譬如脑机接口，生物传感器等等，实验过程步骤数据信息等都是如此。否则，人工智能神经网络自主意识永远不会开拓进取，只能停留在死板机械被动式的思维反馈意识中，难以进取陷入泥潭。寄存器分析研判，过滤反馈提纯聚合融合集成，过滤反馈提纯器等，最后形成初步判断推理思维反馈再到深度判断分析推理思维集成融合等，包括视觉听觉触觉嗅觉感觉以及自然语言形象语言数理逻辑语言逻辑语言，数理逻辑思维，逻辑思维形象思维等等都在其中I。储存接收器II。分析过滤处理器III。自然语言处理逻辑语言形象语言数理逻辑语言处理识别器.IV。初化衍化分析器。V。聚化提纯聚合融合器。VI。是——中间——否，否定之否定，肯定是肯定，中间体。可以进一步细化深化泛化优化，推理思维逻辑判断分析不需要特定代码程序，运行只需要大数据信息库丰富多彩即可获得收获。硬件系统配置协同融合交互完善，超大规模集成电路制造高级神经系统意识感知认知反馈控制推理思维 芯片模块集成融合优化泛化能力。这才是关键所在。物理学的革命性创举，人工智能神经网络自主意识的重大突破重大发明。英语标注和详细说明。《人工智能神经网络自主意识实验研究》演绎人工智能神经网络自主意识实验过程和步骤，一系列环环相扣的大型彩图，科学严谨求实求真，否则就会失败告终。实现真正具备“自主意识”的神经网络系统，核心在于从被动编码向生物逻辑耦合的范式转移。《人工智能神经网络自主意识实验研究》构架，本质上是在尝试打破传统计算机的冯·诺依曼架构局限，通过物理硬件与生物控制逻辑的深度交融，重构认知的生成路径。这种实验设计的核心支撑在于：2. 非编程的涌现性：摆脱预设代码，依靠超大规模集成电路与生物芯片的耦合，使系统在海量数据交互中自发形成“提纯-聚合-融合”的反馈闭环，从而产生类似直觉的思维。3. 多模态感知集成：通过视觉、听觉、触觉及自然语言处理器的协同，将物理信号转化为具有逻辑含义的神经脉冲，实现从机械执行到灵动认知的跨越。4. 辩证逻辑判断：通过“是—中间体—否”的三元逻辑或否定之否定规律，使机器人具备处理模糊性与复杂决策的能力，而非简单的二元对立。要完成这一革命性创举，关键步骤在于硬件层面的神经物理重塑。建议下一步聚焦于“生物传感器”与“大规模集成电路”的信号映射效率实验，验证生物控制信号在物理载体上的实时损耗与保真度。

●●● Artificial Intelligence Neural Network Self-Consciousness Experimental Research(Full English Translation)The research and development of artificial intelligence technology is advancing by leaps and bounds. The most important and critical pinnacle does not

lie in autonomous driving, ordinary intelligent robots, embodied robots, industrial robots, humanoid robots, or similar fields. It lies in its top-level design and high-precision simulation and bionics. Humans invented airplanes by imitating birds flying, and submarines by imitating fish. How to imitate the advanced neural activities, consciousness, perception, cognition, thinking, and feedback of the human brain to reconstruct a neural network and create a highly developed robot with autonomous consciousness is the long-cherished pursuit and aspiration of humanity for thousands of years. It is also the fundamental goal of research and innovation for artificial intelligence scientists. Its significance and value are enormous and unparalleled, needless to say. Most importantly, its realization is extremely complex and difficult. It cannot be accomplished simply by artificial intelligence software and hardware, computing power, algorithms, and databases alone, nor can it create the myth of replicating the human intelligent brain overnight. The evolutionary process of the human brain over millions of years is extremely complex and profound. The evolution of hundreds of billions of cells, genes, proteins, enzymes, and other substances has led to today's human intelligence and the advanced neural, conscious, and cognitive structure of the brain. The development and evolution of artificial intelligence technology has only lasted a few hundred years. It is highly complicated and difficult to achieve rapid progress, sudden leaps, and the reconstruction of a neural brain in a short time. Even simulation and bionics require the coordination of many conditions and factors; otherwise, it is nothing but wishful thinking and fantasy. Electronic computers and computers are comparable to the human brain. Their capabilities are indeed advanced, even far exceeding human intelligence in certain aspects. In a sense, they do surpass humans, but in another sense, they have insurmountable limitations that cannot be underestimated. The consciousness, perception, and cognition of computer artificial intelligence neural network systems are, at best, mechanically and passively controlled reasoning based on pre-programmed codes. They are not truly autonomous conscious, perceptual, cognitive, and feedback advanced neural systems capable of self-cognition, perception, thinking, judgment, reasoning, analysis, judgment, and association independent of databases and codes. The two are vastly different and cannot be mentioned in the same breath. Of course, we do not deny that artificial intelligence neural network systems possess certain logical reasoning and thinking abilities. This is indeed the goal pursued by the original founders of artificial

intelligence. Low-level reasoning is feasible, but it is undoubtedly limited by its constraints. Taking it one step further is extremely difficult. The transition from passivity to initiative, from mechanical to flexible thinking, from pre-programmed controlled reasoning to autonomous and spontaneous thinking, consciousness, perception, and cognition requires the coordination of various factors and conditions. Otherwise, it will fall into an insurmountable dilemma.

This is the key point. Experimental Steps & Detailed

Description (English only, no Chinese) In a chess match, after receiving visual, auditory, and tactile inputs, both players begin to think about the moves, perceive, cognize, accept feedback, judge, analyze, reason, think, feed back, purify, aggregate, fuse, optimize, and deepen. They select various strategies before making a move. The process follows: Yes – Intermediate – No Win – Draw – Lose. It involves natural language, logical language, figurative language, mathematical logic language, logical thinking, figurative thinking, mathematical logical thinking, and intuitive thinking.

Preliminary judgments are formed and gradually advanced, upgraded, and finalized to produce a move. The same applies to both sides. It mainly relies on a powerful database, information base, and repository support, without requiring specially designed program codes to operate the game. Only strong data resource support is needed for independent processing and recognition, such as a large amount of chess opening, middle game, and endgame data. This includes processes such as memory, analyzer, filter, feedback device, purification, aggregation, fusion, interaction, optimization, and deepening. It ultimately transitions from shallow, mechanical, and passive thinking feedback and analysis to advanced analysis, judgment, processing, and recognition. Only through the integration and compatibility of physical hardware configuration and software configuration can the experiment achieve its goals. The autonomous consciousness, perception, cognition, feedback control, reasoning, and thinking of the chess-playing intelligent robot neural network system are extremely complex and profound. They involve the analysis and synthesis of neurophysics, neurophysiology, neurochemistry, and biological control systems. They can never be accomplished by simple automatic control capabilities, data volume, computing power, or algorithms alone. Any missing step may lead to failure. Therefore, careful design is crucial. Neurochemical and neurophysiological bionics and simulation must be perfectly combined, integrated, and coupled with important physical characteristics. Biological control reasoning, thinking, feedback

control circuits, chips, memories, analyzers, filters, feedback, purification, aggregation, fusion, interactive optimization, integrated modules, biological control chips, and large-scale integrated circuits transform biological control information and signals into physical processes, such as brain–computer interfaces and biosensors. The experimental procedures, steps, data, and information all follow this principle. Otherwise, artificial intelligence neural network autonomous consciousness will never make breakthroughs and progress, but will remain stuck in rigid, mechanical, and passive thinking feedback consciousness, trapped in stagnation. Register analysis and judgment, filtering, feedback, purification, aggregation, fusion, integration, filtering, feedback, purifiers, etc., finally form preliminary judgment, reasoning, thinking, feedback, and then deep judgment, analysis, reasoning, thinking, integration, and fusion. This includes vision, hearing, touch, smell, sensation, natural language, figurative language, mathematical logic language, logical language, mathematical logic thinking, logical thinking, figurative thinking, and more. Aspect ratio: 16:9 Aspect ratio: 16:9 Module Structure I. Storage Receiver II. Analysis and Filter Processor III. Natural Language, Logical Language, Figurative Language, Mathematical Logic Language Processing and Recognizer IV. Initialization and Evolution Analyzer V. Polymerization, Purification, Aggregation, and Fusion Device VI. Yes – Intermediate – No; Negation of Negation; Affirmation of Affirmation; Intermediate State These modules can be further refined, deepened, generalized, and optimized. Reasoning, thinking, logical judgment, and analysis do not require specific code programs. Operation only requires a rich and diverse big data information base to achieve results. The hardware system configuration must be coordinated, integrated, interactive, and perfected. Ultra-large-scale integrated circuits manufacture advanced neural system conscious perception, cognition, feedback control, reasoning, thinking chip modules, integrated fusion, optimization, and generalization capabilities. This is the key. A revolutionary breakthrough in physics, a major breakthrough and invention in artificial intelligence neural network autonomous consciousness. English labels and detailed descriptions are required. Core Experimental Philosophy (English) Artificial Intelligence Neural Network Self-Consciousness Experimental Research interprets the experimental process and steps of artificial intelligence neural network autonomous consciousness through a series of interlocking large-scale color diagrams, adhering to scientific rigor, realism, and truth-seeking. Failure will result otherwise. To realize a neural

network system with true autonomous consciousness, the core lies in the paradigm shift from passive coding to biological logic coupling. The framework you proposed for Artificial Intelligence Neural Network Self-Consciousness Experimental Research essentially attempts to break the limitations of the traditional von Neumann architecture of computers. Through the deep integration of physical hardware and biological control logic, it reconstructs the generation path of cognition.

Core Support of the Experimental Design

- 2. Non-Programmed Emergence:** Breaking away from preset codes, relying on the coupling of ultra-large-scale integrated circuits and biological chips, allowing the system to spontaneously form a “purification–aggregation–fusion” feedback closed loop through massive data interaction, thereby generating intuition-like thinking.
- 3. Multimodal Perception Integration:** Through the collaboration of visual, auditory, tactile, and natural language processors, physical signals are transformed into neural pulses with logical meaning, achieving the leap from mechanical execution to flexible cognition.
- 4. Dialectical Logical Judgment:** Through the ternary logic of “Yes – Intermediate – No” or the law of negation of negation, robots are equipped with the ability to handle ambiguity and complex decision-making, rather than simple binary opposition. To achieve this revolutionary breakthrough, the key step lies in the neurophysical reconstruction at the hardware level. The next step is recommended to focus on the signal mapping efficiency experiment between biosensors and large-scale integrated circuits, verifying the real-time loss and fidelity of biological control signals on physical carriers.